

**EARTHQUAKE
EARTHQUAKE®**

XJ-300R

CLASS J HIGH EFFICIENCY
COMPACT AMPLIFIER

USER'S MANUAL



Sound That Will Move You.

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CONGRATULATIONS

Congratulations and thank you for purchasing the XJ-300R amplifier. The XJ series are stand alone compact amplifiers that allow custom home installation to have a powerful high efficiency amplification while fitting into small places. The XJ-300R comes with a set of standard ears that allows the user to install it in a standard single rack mount. Whether you are looking to power a subwoofer or a tactile transducer, the XJ-300R is guaranteed to deliver.

Powered by a switching regulated power supply, the XJ delivers a steady and regulated output which delivers a linear amplification to your load. Only through linear amplification do you get the chance to deliver accuracy in amplification.

What is class J?

Class J is a monitoring circuit that optimizes class D amplifiers. The class J is a class D amplifier which has a microprocessor algorithm that trades in high efficiency for high quality throughout the audio spectrum. In simple terms, the class J gives you the highest efficiency possible without compromising quality.

The XJ amplifiers possess an oversized power supply: 8 ohms, 4 ohms, and even 2 ohms. These amplifiers will deliver clean, accurate sound with massive damping factor.

Enjoy!

FEATURES

WARNING

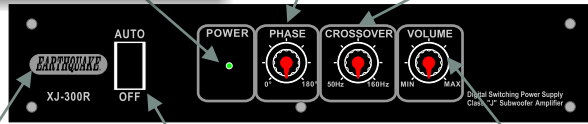
PLEASE READ THIS MANUAL BEFORE ATTEMPTING INSTALLATION

FRONT PANEL LAYOUT

If the LED light is:
red = amplifier is in auto mode
green = amplifier is sensing signal
amplifier is on

set with
an SPL meter
see page 7

set based
on your application
see page 5



cool
brand

auto music sensing setting:
amplifier automatically turns on
when music is on- if the music is
not on for 20 min., the amplifier
goes into sleep mode.

set based on
your input level
and power rating of
your load



comes with 1 pair of mounting ears
to fit into a rack (takes 1 rack space)

comes with rubber
legs for shelf option

REAR PANEL LAYOUT

WARNING

Do not use high level input
with bridged amp

Note that the high level input
stage on the XJ300R has a
common mode ground.
Therefore, you cannot use a
bridge mode amplifier as a
high level input.

high level input
100 WRMS limit
from receiver output

amplified output
to your IW-SUB10
or your tactile



RCA input
from a processor
LFE

110V/220V switch

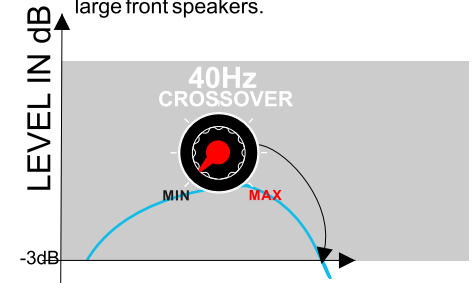
CROSSOVER SETTING

Listed below are crossover settings in a clock like images. Each setting shows the frequency response, 3dB down (half level) and system recommendation for each setting.

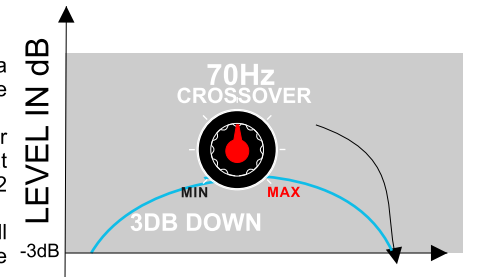
Driving an In-Wall SUB10?

If you are using the XJ-300R to drive a subwoofer (including Earthquake's THOR In-Wall SUB10), then you will need to set the crossover below 100Hz. If you have a large subwoofer such as a 12", 15", or even 18", then you will have a great response with the crossover set to the 12 o'clock setting or minimum setting. For use with a 8" or 10" subwoofer, you will find the 12 o'clock and 2 o'clock setting to be the best range.

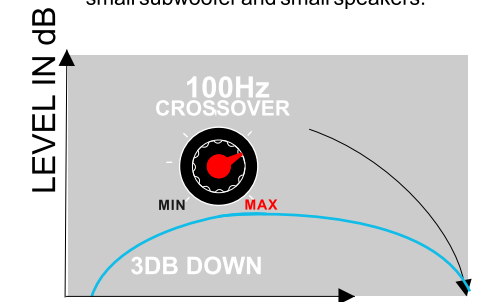
Please use this setting if connecting to a tactile transducer, large subwoofer and large front speakers.



Please use this setting if connecting to a tactile transducer, a large subwoofer and small front speakers.



Please use this setting if connecting to a small subwoofer and small speakers.



Driving a Q10B or a MQB-1?

If you are using the XJ-300R to drive a subwoofer, then you will need to set the crossover below 100Hz. If you have a large subwoofer such as 12" or 15" or even 18", then you will have a great response with the crossover set to 12 o'clock setting or minimum setting. For use with a 10" or 8" subwoofer, you will find 12 o'clock and 2 o'clock setting to be the best range.

XJ-300R PHASE SETTING

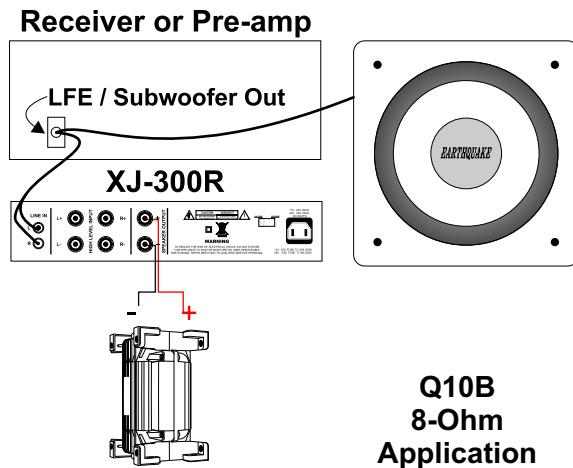
If you are using the XJ-300R to power a subwoofer, you will need to set the time of arrival of your subwoofer frequencies with that of your tower speakers. To do that with high accuracy, you will need to have an SPL meter.

There are many suppliers with such device. RadioShack has one that works just fine.

To set the phase, you will need to send a continuous tone signal through the front speakers and the subwoofer at the same time, rotate the phase to zero setting and place the meter in the listening position. While the system is playing white noise or 50-Hz tone, have someone read the meter. Then, rotate the phase knob until the meter reads the highest reading. This will conclude the setting.

Document the position of your optimum phase and save it for future references.

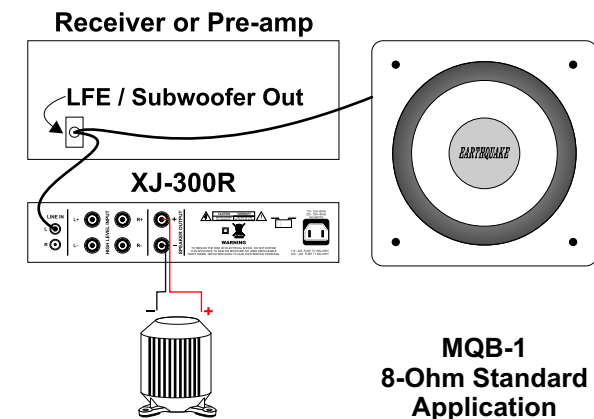
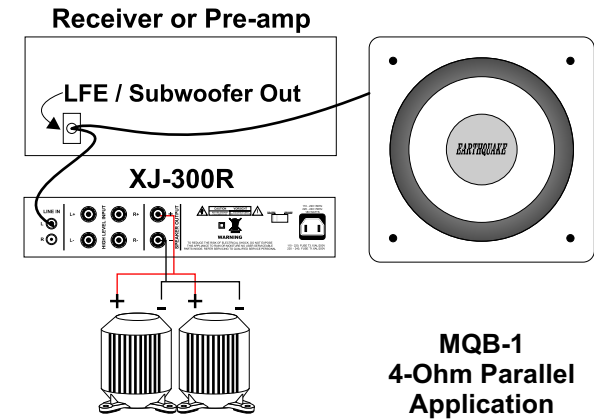
XJ-300R with Q10B



XJ-300R with MQB-1

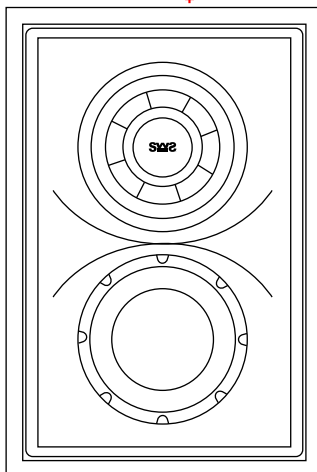
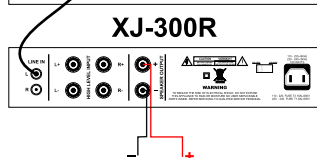
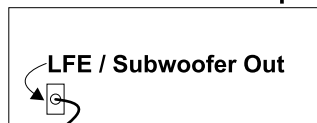
Equipment that will be needed for installation:

- "Y" Connector to apply from receiver or pre-amp to the XJ-300R
- Minimum 12-gauge speaker cable.



XJ-300R with THOR IW-SUB10

Receiver or Pre-amp



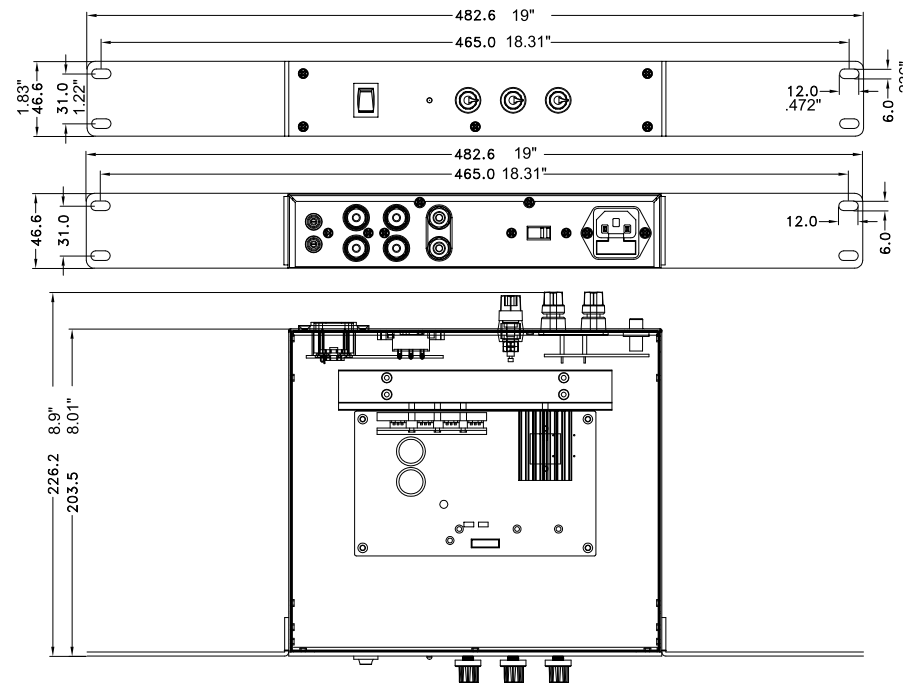
**THOR
4-Ohm Standard
Application**

PRODUCT SUPPORT

Please contact Earthquake Sound Technical Support Department for questions regarding any of the products mentioned in this manual.

Earthquake Sound Corporation
(800) 576-7944 or **(510) 732-1000**, 9:00am - 5:00pm Mon-Fri, Pacific Time
 Email us at: tech@earthquakesound.com

SCHEMATIC



Specifications

Frequency Response

28Hz - 175Hz

Power Line Voltage

110-120C ~ AC/60Hz/180W
 (220 option)

Dimensions (HxWxD)

2" x 9" x 9"

Weight

4.5 lbs

Finish

Black

Input Sensitivity For Full Output

240mVrms from left input with volume control at 0dB, 90mVrms with volume control fully clockwise.

Input Impedance

8.2 kilo-ohm line-level inputs
 32-ohm speaker-level inputs

Internal System Gain

42dB from left input jack to speaker with the Bass Level control at 0dB, 54dB with the control full clockwise

Output Power into 4 ohm load 280 WRMS

Output Power into 8 ohm load 140 WRMS

WARRANTY

Limited 5-Year Warranty

Earthquake warrants the original purchaser that all Factory Sealed New Audio Products to be free from defects in material and workmanship under normal and proper use for a period of five (5) years from the date of purchase (as shown on the original bill of sale with serial number affixed/written on it). The five (5) year warranty period is valid only if an authorized Earthquake dealer properly installs the product and the warranty registration card is properly filled out and sent to Earthquake Sound Corporation. If a non-authorized party installs the product, a ninety (90) day warranty period will be applied.

(A) Five (5) years limited warranty plan coverage guidelines:

- **First year:** Earthquake pays for labor, parts, and ground freight (only in US mainland, not including Alaska and Hawaii. Shipping to us is not covered).
- **Second year:** Earthquake pays for labor only, customer must pay freight both ways.
- **Third, fourth & fifth year:** Earthquake pays labor only. Customer must pay for parts and freight both ways.

(B) Warning:

Products (sent for repair) that are tested by Earthquake technicians and deemed to have no problem(s) will not be covered by the five (5) year limited warranty. Customer will be charged a minimum of one (1) hour of labor (at the ongoing rates) plus shipping charges back to customer.

(C) Earthquake will repair or replace at our option all defective products/parts subject to the following provisions:

- Defective products/parts have not been altered or repaired by other than an Earthquake factory-approved technicians.
- Products/parts are not subjected to negligence, misuse, improper use or accident, damaged by improper line voltage, used with incompatible products or have its serial number or any part of it altered, defaced or removed, or have been used in any way that is contrary to Earthquake's written instructions.

WARRANTY

(D) Warranty Limitations:

Warranty does not cover products that have been modified or abused, including but not limited to the following:

- Damages to speaker cabinet and cabinet finish due to misuse, abuse or improper use of cleaning materials/methods.
- Bent speaker frame, broken speaker connectors, holes in speaker cone, surround & dust cap, burnt speaker voice coil.
- Fading and/or deterioration of speaker components & finish due to improper exposure to elements.
- Bent amplifier casing, damaged finish on the casing due to abuse, misuse or improper use of cleaning material.
- Burnt tracers on PCB.
- Product/part damaged due to poor packaging or abusive shipping conditions.
- Subsequent damage to other products.

A warranty claim will not be valid if the warranty registration card is not properly filled & returned to Earthquake with a copy of the sales invoice. Warranty card is located on the last page of this manual.

(E) Service Request:

To receive product service, contact Earthquake Service Department at (510) 732-1000 and request an RMA number (Return Material Authorization). Items shipped without a valid RMA number will be refused. Make sure you provide us with your complete/correct shipping address, a valid phone number, and a brief description of the problem you are experiencing with the product. In most cases, our technicians might be able to resolve the problem over the phone; Thus, eliminating the need to ship the product.

(F) Shipping Instructions:

Product(s) must be packaged in its original protective box(es) to minimize transport damage and prevent repackaging cost (at the ongoing rates). Shipper claims regarding items damaged in transit must be presented to carrier. Earthquake Sound Corporation reserves the right to refuse improperly packed product. Original bill of sale must accompany product returned to service. We encourage you to include with the package a written description of the problem. Ship product to: Earthquake Sound Corp. 2727 McCone Avenue, Hayward, CA 94545. Ph: (510) 732-1000. You are responsible for the cost of shipping the product to Earthquake Sound Corporation.

(G) Disputes Resolution:

All disputes between clients and Earthquake Sound Corporation resulting from the five (5) year limited warranty policy must be resolved according to the laws & registration of the county of Alameda California.